**Purpose:** A function import Canadian hydrographic bathymetry data from an SQL database, named “mflib”, you will need access to "mflib.chsdem\_ind to use this function. This function appears to be limited to use in the offshore, the calls to SQL at the bottom contain only offshore options (plus an “ALL” option which is not available in the parent *ScallopMap* function)

**Version Control:** There is something called *get.bathy2.r* and *get.bathy2011.r*, so this all needs to be consolidated at some point into one universal file

**Function Arguments Summary**

1. **area**: Choose area corresponding to a list, generally this is done in a call to a parent function. If 'custom' where xlim & ylim are user specified in *ScallopMap*
2. **db.con:** SQL database connection name (CHS source only), user specific, default is “ptran”
3. **un:** Username for your SQL call (CHS source only), please set this up in your R-profile and do not enter it directly into the function, default will only work on DK's computer
4. **pw:** Password for your SQL call (CHS source only), please set this up in your R-profile and do not enter it directly into the function, default will only work on DK's computer
5. **xl**: Range of longitude data to obtain
6. **yl**: Range of latitude data to obtain

**Section 1**

This section contains the entirety of the function. The first part of the function is ensuring that custom data is showing up in the proper format for the call to the SQL database. The second part of the function is the actual call to the database.

***Argument(s)***

* **area**: This is used to define the region we are interested in plotting. If this function is exclusively used in association with *ScallopMap* (not sure any other functions use *get.bathy*) these are the options for **area**:
  1. custom: define the plot area of interest. This will be set in the *ScallopMap* function call along with xlim and ylim
  2. Predefined co-ordinates used to bound the plot area (*ScallopMap* has more options than *get.bathy).*

*Offshore*

* + SS, ESS, WSS, BBn, GB, Ger, Sab, ALL (ALL does not exist in *ScallopMap*)

*Inshore*

* + N/A

***Functions (Excludes basic r functions)***

**odbcConnect**: This connects to the database. In its current form I believe we could generalize this call to help automate the function. To r-profile or not r-profile, that is my question on that…

**sqlQuery**: This sends the query to the database and extracts the information requested

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